

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A radio system comprising:
a portable device that may be carried by a user; and
a stationary device for wirelessly communicating with said portable device, wherein
said portable device operates such that when said portable device receives first signals
from said stationary device, said portable device sends second signals representative of
reception intensity data of the first signals back to said stationary device, and

said stationary device sends the first signals from a plurality of stationary-device side
antennae located at different positions respectively, and when said stationary device receives
the second signals from said portable device through the respective stationary-device side
antennae, said stationary device determines a position of said portable device by using the
reception intensity data of the first signals included in the respective second signals,

wherein said stationary device varies the setting of the ~~amplitude relations~~ relation of
the amplitudes between transmission output powers of the first signals from said respective
stationary-device side antennae and sends the first signals, and said stationary device
determines the position of said portable device by using the reception intensity data obtained
for each said setting,

~~wherein said stationary device determines the position of said portable device as
viewed in a direction in which paired antennae of the stationary device side antennae are
arrayed by using the magnitude relations between the reception intensity data of the paired
antennae,~~

said stationary device is arranged to vary the setting of the relation between
transmission output powers of the first signals among a plurality of conditions including at
least a first condition, a second condition and a third condition, wherein in the first condition
the transmission output power of one of the plurality of stationary-device side antennae is
larger than an other of the plurality of stationary-device side antennae, in the second condition
the transmission output power of the one of the plurality of stationary-device side antennae is

equal to the other, and in the third condition the transmission output power of the one of the plurality of stationary-device side antennae is less than the other,

the first signals include an identification code of each antenna and a condition code specifying which of said first condition, second condition or third condition is being used,

the second signals, in addition to the reception intensity data, contain said antenna identification code and said condition code.

2. (Currently Amended) A radio system comprising:

a portable device that may be carried by a user; and

a stationary device for wirelessly communicating with said portable device, wherein said stationary device sends first signals from a plurality of stationary-device side antennae located at different positions, and

said portable device operates such that when said portable device receives the first signals from said stationary-device side antennae of said stationary device, said portable device determines a position of said portable device by using reception intensity data of the respective first signals, and sends a second signal representative of the result of the position determination back to said stationary device,

wherein said stationary device varies the setting of the ~~amplitude relations~~ relation of the amplitudes between transmission output powers of the first signals from said respective stationary-device side antennae and sends the first signals, and said portable device determines the position of said portable device by using the reception intensity data obtained for each said setting,

~~wherein said stationary device determines the position of said portable device as viewed in a direction in which paired antennae of the stationary device side antennae are arrayed by using the magnitude relations between the reception intensity data of the paired antennae,~~

said stationary device is arranged to vary the setting of the relation between transmission output powers of the first signals among a plurality of conditions including at least a first condition, a second condition and a third condition, wherein in the first condition transmission output power of one of the plurality of stationary-device side antennae is larger than an other of the plurality of stationary-device side antennae, in the second condition

transmission output power of the one of the plurality of stationary-device side antennae is equal to the other, and in the third condition transmission output power of the one of the plurality of stationary-device side antennae is less than the other,

the first signals include an identification code of each antenna and each condition code specifying which of said first condition, second condition or third condition is being used,

the second signals, in addition to the reception intensity data, contain said antenna identification code and said condition code.

3 -6. (Canceled).

7. (Original) The radio system according to claim 1, wherein said stationary device is mounted on a vehicle, and said stationary device and/or said portable device judges from the position determination result that said portable device is inside or outside said vehicle, that a user carrying said portable device gets on said vehicle, or that said user gets off said vehicle.

8. (Original) The radio system according to claim 7, wherein said stationary device wirelessly communicates with said portable device to verify that said portable device is a predetermined one, and automatically executes a control process for realizing a predetermined operation of an object to be controlled in said vehicle, and when judging that the user carrying said portable device got on the vehicle, said stationary device selects a kind of the controlled object or control contents of the controlled object.

9. (Original) The radio system according to claim 8, wherein the controlled object includes a device for locking and unlocking the doors of the vehicle, and the control process includes a signal output for causing said device to operate for locking or unlocking.

10. (Original) The radio system according to claim 7, wherein said stationary device wirelessly communicates with said portable device to verify that said portable device is a predetermined one, and automatically executes a control process for realizing a predetermined operation of an object to be controlled in said vehicle, and when judging that the user carrying

said portable device got on the vehicle, said stationary device and/or said portable device selects such transmission output power of the wireless communication for the verification as to reduce a communication range.

11. (Original) The radio system according to claim 10, wherein the transmission output power is selected to change the wireless communication range for the verification from a relatively broad remote control range including positions outside the vehicle, which are remote from the vehicle by a predetermined distance, to a narrow range within the vehicle.

12. (Previously Presented) The radio system according to claim 11, wherein said portable device includes transmission power adjustment means for adjusting the transmission output power in set increments, and wherein a minimum transmission output power that is received by each of said antennae is selected as the transmission output power for use by said portable device.